2 June 2006

RESPONSE TO COMMENTS
STATE OF CALIFORNIA, DEPARTMENT OF PARKS AND RECREATION
EMPIRE MINE STATE HISTORIC PARK
NEVADA COUNTY
TENTATIVE NPDES PERMIT
AND TIME SCHEDULE ORDER

The tentative NPDES Permit (Tentative Permit) and Time Schedule Order were issued for public review on 30 March 2006. Comments were due 5 May 2006. Barbara Schmitt and David Brownstein, Rick Sanger, and Cyndi Brinkhurst submitted comments on 4 May 2006. The California Department of Parks and Recreation (CDPR or State Parks) submitted comments on 5 May 2006, as did the City of Grass Valley (City), Deltakeeper, Dianna Winslow, Susanna Wilson, Barbara Roemer, Glenn Miller, Tony Pellegrino, Larry Lindauer, Gary Pierazzi, William Larsen, Lynell Garfield, Rick Sanger, Heather Reed, Julie Taylor and Ken Hardin, Frederick Hall, Cindy Rubin, Michael Brackney, Kim Taylor, and Stuart Hoffmann. Comments received after the deadline included those from Jackie and James Waterfall, Timothy Kimball, and Paul Melersh (submitted 7 May 2006); Marisha Finkler and Elise Hougesen (submitted on 8 May 2006); and Renate Otto and Karen Kroeger (received 9 May 2006).

STATE PARKS COMMENTS

State Parks Comment 1—General Comments

In general, the tentative waste discharge requirements (WDR) and time schedule order (TSO) reflect a tremendous effort by Regional Board staff to address a multi-faceted complex environmental and permitting issue associated with the legacy mining wastes. The tentative WDR, however, appears to reflect an attempt to adopt standard permitting language for this relatively unique discharge. As explained further below, we recommend that the adoption of the WDR and TSO be postponed until the other interrelated and condition precedent aspects of the environmental issues are addressed.

CDPR, Newmont, the Regional Board and the California Department of Toxic Substances Control (DTSC) are working on a cleanup and abatement order (CAO) to address the assessment and any response actions required to address threats to public health and the environment from mine wastes at the Empire Mine State Historic Park (EMSHP). It is imperative that objectives and requirements for cleanup activities at the Park are consistent and complimentary across regulatory programs and initiatives.

Operating under the above-mentioned order and obtaining WDRs appear to have conflicting requirements in essence conflict with the goal of the tentative WDRs, i.e., to address the source of the discharge, rather than the effect. To the extent that the metals in the water emanating from the "Magenta Drain" represent a potential impact on water quality, it is not the occurrence of the water on the property owned by the CDPR that is the source of the regulated constituents. If the Magenta Drain were not present, the regulated chemicals would still exist in the groundwater which surfaces at the Magenta Drain. If the tentative WDRs were adopted in their current form, it would inappropriately place the burden for addressing the groundwater conditions caused by the actions of previous property owners on CPDR. The CAO, however, provides a mechanism for investigating and addressing the source of the metals, can require both past and present owners to participate in the abatement.

As noted above, the draft CAO includes requirements that in essence conflict with the goal of the tentative WDRs, i.e., to address the source of the discharge, rather than the effect. To the extent that the metals in the water emanating from the "Magenta Drain" represent a potential impact on water quality, it is not the occurrence of the water on the property owned by the CDPR that is the source of the regulated constituents. If the Magenta Drain were not present, the regulated chemicals would still exist in the groundwater which surfaces at the Magenta Drain. If the tentative WDRs were adopted in their current form, it would inappropriately place the burden for addressing the groundwater conditions caused by the actions of Newmont and its predecessors on CPDR. The CAO, however, provides a mechanism for investigating and addressing the source of the metals, can require both past and present owners to participate in the abatement.

We also have concerns that to the extent the adoption of the tentative WDRs is for a "new source," it may require a California Environmental Quality Act (CEQA) review. We recommend that the WDRs be postponed, pending the adoption of the CAO, which we anticipate would address both the potentially conflicting requirements between the CAO and WDRs, as well as the CEQA exemption, while providing a similar or better level of water quality protection. Our specific comments are provided below.

In general, the tentative WDR permit is difficult to follow with respect to the list of interim versus final effluent limitations and the frequency and amount of sampling for specific constituents. The tables presented in the body of the permit versus those in the Time Schedule Order are not consistent. Additional parameters are also included in Attachment G (Constituent Study). A table for all interim effluent parameters and a table for all final effluent parameters, including the amount and timing of the sample collection, would be helpful.

Response to State Parks Comment 1

The California Department of Parks and Recreation (State Parks) owns and operates the Empire Mine State Historic Park (SHP) in the City of Grass Valley, Nevada County. The Empire Mine SHP was established to document California's mining history. Numerous on-going water quality issues that continue under the ownership of State Parks have been identified as the result of past mining activities. One of these issues is the discharge of "wastewater", specifically a discharge of mine drainage, to surface water. Wastewater discharges to surface waters must be regulated under an NPDES permit in accordance with federal and state laws, the Clean Water Act and the California Porter-Cologne Water Quality Control Act, and applicable federal regulations. The federal regulations prescribe minimum NPDES permit requirements that are necessary to protect water quality and the beneficial uses of waters of the state. A site-specific water quality assessment of the mine drainage discharge revealed numerous water quality problems that degraded the beneficial uses of the receiving stream and downstream waters. The cited laws and regulations require that an NPDES permit be issued, that the permit contain limitations protective of water quality, and that compliance with the limitations be required within a specific time period. An NPDES permit regulating the discharge of waste from Empire Mine to surface waters isrequired by law.

The proposed NPDES permit of the mine drainage discharge does not address the numerous other water quality issues from past mining operations at the site. Other regulatory programs, including industrial stormwater and California Code of Regulations (CCR) Title 27, Division 2, apply to the Empire Mine . The legal requirements of each regulatory program may prevent addressing all of the mining-related

water quality issues at one time. For example, capture and treatment of the mine drainage prior to discharge to surface waters may be necessary to protect water quality within the regulatory time frame, whereas a longer-term holistic solution may be elimination of the discharge itself. The proposed NPDES permit does not prescribe the means of compliance with discharge limitations and standards. The proposed NPDES permit does not prescribe capture and treatment of the discharge. If State Parks can eliminate the discharge of mine waste materials to surface waters within the compliance period, the NPDES permit could be rescinded. The means of compliance with the proposed NPDES permit is the responsibility of the Discharger, State Parks, but should be based on a scientific evaluation of the technical alternatives, consideration of the cost-effectiveness of the alternatives, and the ability to achieve compliance within the allowed time frame. If State Parks finds capture and treatment the cost-effective means of achieving compliance with discharge requirements as a short-term solution while investigations continue regarding the more complex elimination of the discharge, then implementation of that solution should take place in order to achieve compliance with the proposed permit requirements.

As stated in Finding E in the tentative NPDES permit, the *"action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) in accordance with Section 13389 of the CWC."*

Section 13389 of the California Water Code (CWC) states that "[n]*either the state board nor the regional boards shall be required to comply with the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code prior to the adoption of any waste discharge requirement, except requirements for new sources as defined in the Federal Water Pollution Control Act or acts amendatory thereof or supplementary thereto.*"

40 CFR 122.2 defines a new source as "*any building, structure, facility or installation from which there is or may be a 'discharge of pollutants,' the construction of which commenced: (a) After promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or (b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal*."

Since the Empire Mine has been in existence for more than 100 years, its construction commenced prior to promulgation of applicable standards of performance under section 306 of the Clean Water Act (CWA) and therefore, is not a new source.

The discharge of wastes from the mine is not a "new" discharge. However, construction of a treatment unit for the mine drainage may be subject to CEQA requirements and State Parks would be the responsible lead agency. Issuance of the NPDES permit regulating the wastewater discharge is exempt from CEQA.

As discussed in the Fact Sheet to the tentative permit, at VII.B.7 (p. F-53), "[t]*he use and location of compliances schedules in the permit depends on the Discharger's ability to comply and the source of the applied water quality criteria*." The Fact Sheet, at VII.B.7.a, explains that "[f]*or non-CTR-based Effluent Limitations, any necessary time schedules were generally included in the accompanying time schedule order*." The Fact Sheet, at VII.B.7.b, also cites the State Water Resources Control Board's (State Water Board) *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California* (State Implementation Policy or SIP) which, at section 2.1, states that

"[b]*ased on an existing discharger's request and demonstration that it is infeasible for the discharger to achieve immediate compliance with a CTR criterion, or with an effluent limitation based on a CTR criterion, the RWQCB may establish a compliance schedule in an NPDES permit*."

Sampling requirements are specified in the proposed Monitoring and Reporting Program (Attachment E). Attachment E specifies, at X.B.3 (p. E-10), a schedule of when monitoring is to begin and when results are to be submitted. Provision VI.C.2.a (p. 19) would require State Parks to conduct a constituent study, the details of which are contained in Attachment G, and provides a schedule for conducting the study.

The Final Effluent Limitations contained in IV.A.1 of the proposed permit take effect on the effective date of the permit (1 August 2006), with the exception that the Interim Effluent Limitations contained in IV.A.2 of the proposed permit are effective in the interim (1 August 2006 to 18 May 2010) for the listed constituents (i.e., cadmium, chromium, copper, lead, mercury, nickel, thallium, zinc). Limited constituents without Interim Effluent Limitations in the proposed permit are not exempted from the monitoring requirements contained in the Monitoring and Reporting Program.

Exceedances of Final Effluent Limitations for constituents for which the proposed permit does not and cannot (in this case, any non-CTR/NTR-based effluent limitations) contain Interim Effluent Limitations would be considered violations of the permit. The proposed time schedule order was prepared to address anticipated non-compliance with these limitations and includes interim requirements, including interim limitations, and a time schedule for achieving compliance.

State Parks Comment 2—Type of Facility

I. Facility Information - Type of Facility: Industrial (Gold Mine)

The Facility Information should be corrected to reflect that the CDPR operations are not industrial, i.e., CDPR operates a park. While property includes lands that were formerly mined, mining ceased in 1956.

Response to State Parks Comment 2

The tentative NPDES permit for the Empire Mine State Historic Park was drafted to regulate the discharge of mine drainage from the Empire Mine. The Type of Facility field is intended to differentiate between publicly owned treatment works (*i.e.*, sewage treatment plants) and other industrial discharges. The Empire Mine SHP is a historic mine site. The mine site, even if not currently operating, is designated as an industrial activity. Significant water quality problems have been documented as having been caused by the discharge from the mine site (Empire Mine SHP).

State Parks Comment 3—Finding A

II. Findings, A. Background: CDPR applied for a National Pollution Discharge Elimination System (System) permit.

The Findings should reflect that the CDPR was ordered by the Regional Board to apply for a NPDES permit.

Response to State Parks Comment 3

The sixteenth paragraph (p. F-6) under Facility Description in the Fact Sheet includes the following:

> "*The Regional Water Board, on 17 December 2004 issued an order pursuant to California Water Code section 13267 (13267 Order) requiring the Discharger to submit a technical report, including a report of waste discharge to apply for an NPDES permit for discharges from the Magenta Drain Tunnel. The Discharger submitted a report of waste discharge, dated 23 September 2005, to comply with the 13267 Order.*"

State Parks Comment 4—Finding B

B. Facility Description: There is currently no treatment provided.

The Findings should reflect that there are other options to compliance in addition to treatment and that there are ongoing concurrent investigations to address the nature and source of the groundwater surfacing at the "Magenta Drain" portal. The discharge from a treatment system for the Magenta Drain may be considered a "new source" as defined by the Clean Water Act, i.e., "any building structure, facility or installation from which there is or may be, a discharge of pollutants, the construction of which commenced after the publication of proposed regulations prescribing a standard of performance under Section 306 of the Act." If our understanding is correct, the cited CEQA exemption may not apply and may necessitate postponement of the adoption of the tentative WDRs until a CEQA review for the proposed project has been completed.

Response to State Parks Comment 4

The Fact Sheet for the tentative NPDES permit, at II.E.1, states the following:

> "*In order to achieve compliance with the terms and conditions of this Order, some action(s) will need to be undertaken within the compliance period granted. This Order contains Provisions and schedules requiring the Discharger to determine and implement a means of compliance.*"

Also, see Response to Parks Comment 1.

State Parks Comment 5—Finding E

E. California Environmental Quality Act (CEQA): This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) in accordance with Section 13389 of the CWC.

It is our understanding that Section 13389 of the California Water Code provides exemptions from CEQA, except for "new sources as defined in the Federal Water Pollution Control Act." As the permit requires and approves the discharge from a yet to be built facility, the discharge may be considered a new source as defined by the Federal Water Pollution Control Act. If this discharge is deemed a "new source," the adoption of the tentative WDRs may be an act subject to public review under CEQA and, as such, may need to be deferred until a CEQA review has been completed.

Response to State Parks Comment 5

See Response to Parks Comment 1.

State Parks Comment 6—Finding F

F. Technology-Based Effluent Limitations: This Order includes technology-based effluent limitations based on Effluent Limitation Guidelines and Standards for the Ore Mining and Dressing Point Source Category…

Should the reference to the technology based effluent standards be removed from the tentative WDR? Effluent Limitations Guidelines and Standards for the Ore Mining and Dressing Point Source Category in 40 CFR Part 440, Subpart J—Copper, Lead, Zinc, Gold, Silver, and Molybdenum Ores Subcategory are identified as being applicable to "Mines that produce copper, lead, zinc, gold, etc." As there are no mining operations at the Empire Mine State Historic Park, nor is it clear that CDPR has the right to conduct mining of underground assets that remain the "perpetual right and ownership" of Newmont, these categorical effluent limitations might not apply.

Response to State Parks Comment 6

As stated in the Fact Sheet to the tentative NPDES permit, at IV.B.2.c, 40 CFR 440.132(g) defines a "mine" as "*an active mining area, including all land and property placed under, or used above the surface of such land, used in or resulting from the work of extracting metal ore or minerals from their natural deposits by any means or method, including secondary recovery of metal ore from refuse or other storage piles, wastes, or rock dumps and mill tailings derived from the mining, cleaning, or concentration of metal ores.*"

As cited at IV.B.2.d of the Fact Sheet to the tentative permit, 40 CFR 440.132(h) defines "mine drainage" as "*any water drained, pumped, or siphoned from a mine*".

As stated at IV.B.2.e of the Fact Sheet to the tentative permit, "[t]*he Empire Mine State Historic Park consists of land and property used in or resulting from the work of extracting metal ore or minerals, specifically gold, from their natural deposits by any means or method. The discharge from the Magenta Drain is water drained from the Empire Mine. Therefore, the discharge is mine drainage and Effluent Limitations Guidelines and Standards for the Ore Mining and Dressing Point Source Category in 40 CFR Part 440, Subpart J—Copper, Lead, Zinc, Gold, Silver, and Molybdenum Ores Subcategory apply. In addition, it is reasonable that effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT) and the application of the best practicable control technology (BPT) for an active mine are also representative of the degree of effluent reduction attainable by the application of BAT and BPT for a mine that is not in production.*"

State Parks Comment 7—Finding N

N. Antidegradation Policy: Resolution 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings…The permitted discharge is consistent with the antidegradation provision of 40 CFR CFR §131.12 and State Water Board Resolution 68-16.

It is unclear how the Federal and State antidegradation policies have been applied to this permitted discharge. We do not believe that the CDPR has undertaken any activity that has resulted in the production of waste or pollutants that has resulted in a degradation of water quality. State Water Resources Control Board (SWRCB) Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California, states that "[a]ny activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge…will be required to meet waste discharge requirements."

The CDPR acknowledges that past mining practices have had impacts to water quality. However, it appears that the CDPR is being required to abate pollutants resulting from historic mining activities. The CDPR understands that under Section 13304 of the California Water Code, the Regional Board can require dischargers, including current property owners, to address past discharges, these requirements also can be applied to prior landowners and operators, e.g., Newmont. Therefore, the CAO might be more appropriate for requiring actions to address the impacts of the historical mining practices on water quality at the Empire Mine State Historic Park.

Response to State Parks Comment 7

As stated at III.C.6 of the Fact Sheet to the tentative NPDES permit, the tentative Order "*imposes effluent limitations on the existing discharge for the first time. The primary means of compliance are (1) treatment of waste stream to comply with effluent limitations and (2) cessation of discharge. Implementation of either alternative would result in improved water quality downstream of the existing discharge, thereby complying with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution 68-16*."

Mining is the activity that has resulted in the production of waste or pollutants that has resulted in a degradation of water quality. State Parks intentionally purchased the mine and therefore the associated water quality impacts. While there is no question regarding the current ownership of the mine site, State Parks did not submit sufficient information in its application and report of waste discharge that would allow the naming of additional responsible parties.

State Parks Comment 8—Discharge Prohibition A

III. Discharge Prohibitions: A. Discharge of wastewater at a location or in a manner different from that prescribed in the Findings is prohibited.

As the discharge surfacing at the "Magenta Drain" portal originates from groundwater, which may travel through property owned by others, should the Discharge Prohibitions be revised to clarify that CPDR does not have the ability to control where the groundwater surfaces?

Response to State Parks Comment 8

The proposed permit covers the discharge of "wastewater" from the "Magenta Drain" at the Empire Mine. If other wastewater discharges are discovered from other parts of the mine, other mines, or on other properties, the proper means of regulation of the wastewater discharge will be determined based on the site-specific facts of that discharge.

State Parks Comment 9—Discharge Prohibition B

III. Discharge Prohibitions: B. The by-pass or overflow of wastes to surface waters is prohibited.

Should the tentative WDRs be modified to clarify that until a system is installed, the discharge is not treated and that this section is not applicable?

Response to State Parks Comment 9

The Fact Sheet to the proposed permit does state, at II.A (p. F-6), that "*no treatment is currently provided for this discharge*." The terms "bypass" and "overflow" have specific definitions based on the specific unit systems and processes. Until a collection and treatment system is constructed, it is not possible to bypass or overflow the system; therefore, while we understand the expressed concern, this section has not been the subject of misinterpretation with respect to compliance determination.

State Parks Comment 10—Discharge Prohibition C

III. Discharge Prohibitions: C. Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.

Should the tentative WDRs be modified to clarify that either this prohibition only applies after the installation of the treatment system, or that under current conditions the discharge is not a nuisance?

Response to State Parks Comment 10

Section 13050 of the California Water Code defines nuisance as "*anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. (3) Occurs during, or as a result of, the treatment or disposal of wastes*."

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) includes various objectives that water shall not contain constituents (biostimulatory substances, color, floating material, oil and grease, sediment, settleable material, suspended material, and tastes and odors) in concentrations that cause nuisance or adversely affect beneficial uses.

More than two-dozen residents commented on the tentative permit. Their comments focused primarily on the impact that the discharge from the Empire Mine has on the Grass Valley community's usage of the City's Memorial Park. This would appear to constitute a nuisance condition.

State Parks Comment 11—Interim Effluent Limitations 2.a

IV. Effluent Limitations and Discharge Specifications: 2. Interim Effluent Limitations – Discharge Point EFF-01, a. …the discharge shall maintain compliance with the following interim effluent limitations...

While the proposed interim effluent standards appear to have been developed using best engineering methods and judgment, the CDPR does not have the ability to control the discharge to prevent exceedance of the specified limits. In addition, it is unclear that adequate data exists to demonstrate that it is technically or economically feasible to comply with the effluent limitations and specifications. Therefore, should these requirements either be modified or the nature of the enforcement for violations be specified?

Response to State Parks Comment 11

As stated in the third paragraph under Interim Effluent Limitations (Fact Sheet, IV.E, p. F-42), "[i]*nterim effluent limitations for constituents with CTR/NTR-based effluent limitations were based on the projected MEC (maximum detected effluent concentration) for each constituent. The projected MEC is determined by multiplying the observed MEC by a factor that accounts for statistical variation. The multiplying factor is determined (for 99% confidence level and 99% probability basis) using the number of results available and the coefficient of variation (standard deviation divided by the mean) of the sample results*." In addition, the observed MEC was typically four to five times the average concentration discharged. It is statistically unlikely that the interim effluent limitations contained in the tentative permit would be exceeded. The Code of Federal Regulations (CFR) and the California Water Code (CWC) specify various means of enforcement. Enforcement would depend on the nature and circumstances of the violation(s) and, with the exception of mandatory minimum penalties (described in California Water Code §13385), cannot be predicted or specified. A discussion of various factors to be considered in determining appropriate enforcement action(s) to take is included in the State Water Resources Control Board's Enforcement Policy, which is available at http://www.waterboards.ca.gov/plnspols/docs/wqep.doc

State Parks Comment 12—Interim Effluent Limitations 2.b

IV. Effluent Limitations and Discharge Specifications: 2. Interim Effluent Limitations – Discharge Point EFF-01, b. …Acute Toxicity...

See previous comment.

Response to State Parks Comment 12

As cited in the Fact Sheet to the tentative Order, at IV.C.3.u (p. F-30), the Basin Plan states that "[a]*ll waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.*"

The Basin Plan requires that "[a]*s a minimum, compliance with this objective…shall be evaluated with a 96-hour bioassay*." The proposed permit requires both acute and chronic toxicity monitoring to evaluate compliance with this water quality objective.

The Basin Plan further states that "…*effluent limits based upon acute biotoxicity tests of effluents will be prescribed*…". Effluent limitations for acute toxicity are included in the proposed permit.

State Parks Comment 13—Surface Water Limitations A.9

Receiving Water Limitations: A. Surface Water Limitations, 9. Pesticides

Given the historical use of the property and source of the discharge, is the benefit to be obtained by monitoring for pesticides warranted relative to its relative high cost?

Response to State Parks Comment 13

Surface Water Limitations specifies limitations, rather than monitoring requirements. The Monitoring and Reporting Program to the tentative permit, at VIII.A.1 (p. E-8) specifies receiving surface water monitoring requirements. Please note that pesticides are not included in the routine receiving water monitoring requirements.

State Parks Comment 14—Surface Water Limitations A.10

V. Receiving Water Limitations: A. Surface Water Limitations, 10. Radioactivity

Is there existing data for radioactivity in the groundwater surfacing from the mine portal? Should the tentative WDRs include effluent standards that may not be technically feasible to achieve?

Response to State Parks Comment 14

The cited limitation is a Receiving Water Limitation for surface waters; it is not an effluent limitation. The identified radioactivity is associated with manmade activities and is not expected to be a concern from this mine drainage discharge. However, radioactive materials, when discovered are technically controllable.

State Parks Comment 15—Surface Water Limitations A.15

V. Receiving Water Limitations: A. Surface Water Limitations, 15. Temperature. The natural temperature to be increased by more than 5^{o} F.

As the receiving water has been influenced by discharge from the Magenta Drain portal, how would "natural temperature" be determined? Is there existing data to support the conclusion that it is technically feasible to achieve compliance with this standard? .

Response to State Parks Comment 15

As cited in the Fact Sheet to the tentative permit, at V.A.1 (p. F-43), the Basin Plan states that "[t]*he numerical and narrative water quality objectives define the least stringent standards that the Regional Water Board will apply to regional waters in order to protect the beneficial uses*." The Fact Sheet, at V.A.5 (pp. F-44 – F-45), states that "[t]*he Bear River has the beneficial uses of both COLD and WARM. The Basin Plan includes the objective that "[a]*t no time or place shall the temperature of COLD or WARM intrastate waters be increased more than 5ºF above natural receiving water temperature.' *This Order includes a receiving water limitation based on this objective*." Since the initial portal discharge is situated at the stream headwaters, compliance with this objective would be determined at the next receiving stream where the RWS-002 temperature value would be evaluated to be the "natural" upstream temperature. While we do not anticipate this to be a compliance issue related to this discharge, it is technically feasible to control the temperature of wastewater discharges.

State Parks Comment 16—Provision A.2.f

VI. Provisions, A. Standard Provisions: 2. Regional Board Standard Provisions: f. By-pass…is prohibited

Should the tentative WDRs be modified to clarify that this requirement would not apply until a treatment facility had been installed?

Response to State Parks Comment 16

Until such time as treatment is provided, there is no treatment facility to by-pass, and therefore no possibility of violating this requirement. Also, please see Response to Parks Comment 9.

State Parks Comment 17—Provision A.2.j

VI. Provisions, A. Standard Provisions: 2. Regional Board Standard Provisions: j. Neither the treatment nor the discharge shall create a condition of nuisance…

See comment above.

Response to State Parks Comment 17

See Response to Parks Comment 10.

State Parks Comment 18—Provision A.2.k

VI. Provisions, A. Standard Provisions: 2. Regional Board Standard Provisions, k. Safeguard to electric power failure

Should the tentative WDRs be modified to clarify that this requirement would not apply until a treatment facility had been installed?

Response to State Parks Comment 18

Until treatment is provided, there is no treatment facility to which electric power may fail, be lost, or be reduced, and therefore no possibility of violating this requirement. Also, please see Response to Parks Comment 9.

State Parks Comment 19—Provision VI.C.6.c

VI. Provisions, C. Special Provisions: 6. Other Special Provisions, c. Prior to making any change in the discharge point, place of use, or purpose of use of the wastewater, the Discharger shall obtain approval of, or clearance from the State Water Resources Control Board (Division of Water Rights).

Is it necessary to determine the rights and ownership of the flow before the tentative WDRs are adopted, to confirm that CDPR has the right to remove and treat the Magenta Drain portal water?

Response to State Parks Comment 19

Provision VI.C.6.c does not grant a water right. It advises Parks of the requirement to obtain approval or clearance from the State Water Resources Control Board, Division of Water Rights if the discharge is removed from the waterway. The capture and treatment of wastewater would not remove it from the waterway; it would improve the quality. If the means of compliance ultimately eliminates the discharge from surface waters, then the Division of Water Rights must first be consulted.

State Parks Comment 20—Provision VII.A

VII. Additional Provisions – Notification Levels. A. Non-Municipal Facilities. Existing manufacturing, commercial, mining, and silviculture discharges shall notify the Regional Water Board…

Should the tentative WDRs be modified to clarify that this section is not applicable to the operation of the CDPR?

Response to State Parks Comment 20

Modification is not necessary. Inclusion of this language in the permit is required by 40 CFR 122.42.

State Parks Comment 21—Fact Sheet I. Permit Information

Attachment F – Fact Sheet. I. Permit Information. Type of Facility – SIC Code 1041

The Fact Sheet should be modified to reflect that the "facility" is a State Park.

Response to State Parks Comment 21

See Response to Parks Comment 2.

State Parks Comment 22—Fact Sheet I.A

Attachment F – Fact Sheet. I. A. The State of California, Department of Parks and Recreation (herein Discharger) is the owner and operator of the Empire Mine State Park…a historic gold mine.

The Fact Sheet should be modified to clarify that the CDPR is not an operator of gold mine, but operates a State Park.

Response to State Parks Comment 22

The Fact Sheet, at I.A, correctly states that the "[t]*he State of California, Department of Parks and Recreation (hereinafter Discharger) is the owner and operator of the Empire Mine State Historic Park (hereinafter Facility), a historic gold mine*."

State Parks Comment 23—Fact Sheet I.C.1A

Attachment F – Fact Sheet. I. C. State and Federal Regulations, Policies, and Plans. 1. Water Quality Control Plans. "In addition, State Water Resources Control Board (State Water Board) Resolution 88-63 requires that, with certain exceptions, the Regional Board assign municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan."

Would the identified exceptions to the identification of a water body as drinking water supply under State Water Board Resolution 88-63, be potentially applicable to the Magenta Drain portal discharge? Among the exceptions identified in State Water Resources Control Board (SWRCB) Resolution 88-63 to which water bodies are designated for drinking water is the condition where there "is contamination, either by natural processes or by human activity (unrelated to the specific pollution incident) that cannot reasonably be treated for domestic use using either Best Management Practices or best economically achievable treatment practices."

Would the occurrence of metals in groundwater associated with legacy mining wastes, which surface at the Magenta Drain portal, which may not be capable of being reasonably treated, be an appropriate basis for an exception to SWRCB Resolution 88-63? Empire Mine State Park is located in an area of over 3,700 acres of historic mining properties to which Newmont stills retains the mining rights. To the extent that metals are present above background conditions in surface water in this area, the working of the mines appears to have resulted in the contamination of the groundwater that has surfaced with the metals. Data indicate that occurrence of elevated levels of metals in groundwater may not be a localized problem, but may reflect a regional groundwater contamination issue from historic mining activities. A review of the SWRCB Geotracker database reveals that iron is present in groundwater up to 4,810 micrograms per liter (µg/l) in downtown Grass Valley. Groundwater with similar quality surfaces from mine workings near the City of Grass Valley Wastewater Treatment Plant with iron reported up to 14,000 µg/l and manganese up to 1,320 µg/l. If the vast extent of the mine workings has impacted groundwater, would the requirement to treat the surface manifestation of the mine-impacted groundwater be technically or economically feasible?

Similarly, if the mine workings remain open to surface water infiltration, groundwater could continue to contact the underground workings and leach metals. The groundwater that surfaces could require treatment ad infinitum, unless the source is addressed. Therefore, would the economic or technical

feasibility exception under Resolution 88-63 be potentially applicable in an area where compliance would require all property owners to treat mine-impacted groundwater that surfaces on their property for as long as permit requirements exist?

Response to State Parks Comment 23

Resolution 88-63 resolves the following:

> "*All surface and ground waters of the State are considered to be suitable, or potentially suitable, for municipal or domestic water supply and should be so designated by the Regional Boards with the exception of:*
>
> *1. Surface and ground waters where:*
>
> *a. The total dissolved solids (TDS) exceed 3,000 mg/L (5,000 uS/cm, electrical conductivity) and it is not reasonably expected by Regional Boards to supply a public water system, or*
>
> *b. There is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either Best Management Practices or best economically achievable treatment practices, or*
>
> *c. The water source does not provide sufficient water to supply a single well capable of producing an average sustained yield of 200 gallons per day.*
>
> *2. Surface waters where:*
>
> *a. The water is in systems designed or modified to collect or treat municipal or industrial wastewaters, process waters, mining wastewaters, or storm water runoff, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards; or,*
>
> b. *The water is in systems designed or modified for the primary purpose of conveying or holding agricultural drainage waters, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards*."

Based on Regional Water Board staff's interpretation of the cited Resolution, an exception for the beneficial use of municipal and domestic water supply is not technically appropriate. Municipal and/or domestic water supply has been documented as an actual use of downstream waters.

The site-specific review of the quality of the Magenta Drain discharge indicates that the discharge should be economically and reasonably treatable. Newmont Mining Corporation staff has conducted sampling of the discharge and initiated treatability assessments. Verbal

communications with Newmont staff indicate compliance with the proposed permit limitations should be readily achievable based on preliminary work.

State Parks Comment 24—Fact Sheet V.A

Attachment F – Fact Sheet, V. Rationale for Receiving Water Limitations, A. Surface Water. "State Water Board Resolution No. 68-16, the Antidegradation Policy, does not allow changes in water quality less than that prescribed in Water Quality Control Plans (Basin Plans)…This Order contains Receiving Water Limitations based on the Basin Plan numerical and narrative water quality objectives…"

Are there adequate data to indicate that beneficial uses are being impacted by the existing discharge? The tributary rule has been applied to the "unnamed tributary to the South Fork of Wolf Creek". However, doesn't the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin Basins allow the Regional Board to use judgment in the applying beneficial uses to tributaries? As the water quality of the unnamed tributary has not likely changed since groundwater began surfacing at the portal. Are there data to indicate that improvements in water quality would provide benefit to the people of the State, or that there has been any degradation of water "as of the date on which such [Antidegradation] policies became effective"?

Response to State Parks Comment 24

It has been documented by site-specific sampling that the mine drainage discharge from Empire Mine contains pollutants that have degraded water quality. A site-specific review of the receiving stream and downstream waters by Regional Water Board staff revealed that the prescribed beneficial uses are applicable and appropriate for the receiving stream (see III.C.1 of Attachment F). Regional Water Board staff assessed the site-specific sampling data and conducted a reasonable potential analysis in development of the proposed permit, concluding that the mine drainage discharge degraded the beneficial uses of the receiving stream and downstream waters. As stated in the responses to comments above, work conducted to date by Newmont Mining corporation staff indicates that the mine drainage discharge can be reasonably treated to achieve compliance with waste discharge requirements. Maintenance of high quality waters, as prescribed by the Antidegradation Policy, is appropriate for this discharge.

State Parks Comment 25—Constituent Study

Attachment G – Constituent Study. "Samples shall be collected from the effluent and upstream receiving water and analyzed for the constituents listed in Attachment G, Section II…."
The Regional Board's definition of "upstream receiving water" should be provided (i.e. background or surface water upstream of the discharge point). This may be difficult to determine, as the source for water emanating from the Magenta Drain may be a combination of waters from several sources.

Response to State Parks Comment 25

It is Regional Water Board staff's understanding that Newmont Mining corporation staff have already begun this sampling. If State Parks believes the receiving water definition is complex, Regional Water Board staff would be happy to review a workplan to assure any sampling effort is appropriate. Since the discharge from the Magenta Drain is located at the headwaters of the unnamed tributary to the South

Fork of Wolf Creek, the next downstream water body (the South Fork of Wolf Creek) at RWS-002 will be used as the upstream receiving water. Also, please see Response to Parks Comment 15.

CITY OF GRASS VALLEY COMMENTS

City Comment 1—Origin of Wastewater

The Order states that during an inspection by Regional Board staff in March 2002, it was determined that the "headwaters" of the Magenta Drain originate within the Park. The Order also states that in April 2002, Regional Board staff asked the Park to determine the source of the water coming from the drain. The Park is also quoted in the Order as having said the current source of the drainage is still under investigation. We believe the discrepancies need to be eliminated. It is important to identify the source and cause of the polluted wastewater. We strongly believe further investigation and certainty is warranted before issuing the final Order.

Response to City Comment 1

The headwaters of the unnamed tributary to South Fork Wolf Creek into which the Magenta Drain discharges enters does originate within the Empire Mine State Historic Park property. Regional Water Board staff do not see that the cited information conflicts or is uncertain. Based on observations by Regional Water Board staff, the headwaters of the unnamed tributary into which the Magenta Drain discharges does originate within Park boundaries. The wastewater origins are important, since elimination of the discharge would be a preferable alternative to capture and treatment of the discharge. The inner workings of the mine and groundwater and surface water entrances into the mine are complex, although if the source of the pollution is ultimately controllable, then control of the source could eliminate the wastewater discharge.

City Comment 2—Identity of Discharger(s)

The Order identifies the Park as the facility which is discharging mine drainage through the Magenta Drain into an unnamed tributary of the South Fork of Wolf Creek. The Order does not fully discuss the property ownership scheme in place at the site, nor take into account the fact that a subsurface estate likely exists. Generally, under California law, subsurface mineral rights constitute a separate estate in the property as is on occasion reflected by separate taxation of that estate. We believe such a separate estate exists under portions or all of the Park property. While there may be some remaining questions as to ownership of the mine workings which are the likely source and means of conveyance of the Magenta Drain wastewater, we believe it is appropriate to name the subsurface estate owner, or owners, as Dischargers on the Order. We urge the Regional Board to further investigate this possibility and take the steps necessary to ensure all responsible parties are included in the final Order.

Response to City Comment 2

Based on the currently available information submitted to the Regional Water Board, it is only possible to name State Parks as a responsible party (RP) in the proposed permit. If additional information becomes available showing others are RPs this Order could be reopened and modified. Regional Water Board staff thoroughly reviewed the submitted information regarding RPs in drafting the proposed permit.

City Comment 3—Potential Precedent

The Grass Valley area including and surrounding the Park property potentially contains hundreds of miles of mine workings and numerous subsurface estates. In pursuing responsibility for discharges of mine drainage, we believe the Regional Board must thoroughly investigate and determine all parties potentially responsible for obtaining a discharge permit. Typically, the current surface owners did not participate in or benefit from the activities which created the mine workings. The surface owners are merely left with the legacy pollutants which may unfortunately daylight on their surface estate. By only naming the Park, we are concerned that the Order may be construed by some as an undesirable precedent for the proposition that the Regional Board is willing to place the entire responsibility for addressing legacy mine drainage on the surface owners. Although we recognize the difficulty in establishing the discharger responsibility of the parties having ownership of the subsurface mineral estate, we believe it is a matter of public concern and that every effort should be exhausted to identify and name all viable responsible parties.

Response to City Comment 3

The permit is based on site-specific conditions and information. Also, see Response to City Comment 2.

DELTAKEEPER COMMENTS

Deltakeeper Comment 1—Interim Limits and Compliance Schedule

The dangerously high interim limits and lengthy compliance schedule of this tentative permit cannot possibly protect the health of aquatic life and wildlife in this watershed.

Response to Deltakeeper Comment 1

The Regional Water Board recognizes that the discharge from the Magenta Drain contains high levels of pollutants that may affect water quality and agrees that the discharge should be controlled as soon as possible to limit exposure by the public and wildlife. The intent of the proposed permit is to require the Department of Parks to control the discharge as soon as is reasonable. Since the discharge has not previously been regulated, the proposed permit sets forth interim effluent limits based on the worst-case concentrations in the discharge, but such high levels occur rarely. The permit and time schedule order include reasonable schedules to build and operate a treatment system to attain final effluent limits that comply with the Clean Water Act and the California Water Code. Until the system is built and operated, however, it is not feasible to stop the discharge and the discharge will continue at its current quality. More stringent interim limits would not change the concentrations in the discharge because the discharge will not be controlled until the treatment system is built or the discharge is stopped in some other way. The proposed time schedule was developed based on experience regarding the amount of time it can take to plan, sample, conduct environmental review, design and construct treatment systems.

Deltakeeper Comment 2—Citizen Concern, Accessibility, and Exposure

Grass Valley citizens have long been concerned about a discolored, year-round drainage from Magenta Drain's portal on State Parks' land into an unnamed waterway that traverses an incredibly public part of the town, including a city park. Even today, this contaminated creek is accessible right next to city tennis courts, from a trail along one side all the way to the portal and from backyards of houses where children's toys are readily visible. Soil discoloration and "yellow boy" remains visible at the portal site. Magenta Drain is not an out-of-the-way, hidden little waterway but a dangerous one frequently used by the families of Grass Valley trying to enjoy their neighborhood. The tentative permit allows State Parks to discharge a highly toxic level of effluent for years and years—all the while placing these neighborhood families at risk.

Response to Deltakeeper Comment 2

See the response to Comment No. 1 above regarding compliance schedules. Regional Water Board staff issued a Proposition 65 hazardous waste notification for the "yellow boy" in the streambed flowing from the Magenta Drain through the City's park. The stream through the City's park has been well posted. As was mentioned previously, the Empire Mine site is subject to regulation by the Regional Water Board under other statutes and regulations. The cleanup of the "yellow boy" in the unnamed tributary to the South Fork of Wolf Creek is being addressed pursuant to Title 27California Code of Regulations Division 2, and is not part of the proposed permit (the subject of these comments). Compliance with the proposed permit, however, will reduce discharges of pollutants that contribute to water quality and health concerns in the unnamed tributary to the South Fork of Wolf Creek.

Deltakeeper Comment 3—Historical Regional Board Action Regarding Magenta Drain

Deltakeeper is pleased that after two decades of being aware of the toxic discharge and the Parks' need for a Clean Water Act permit, the Regional Board is now taking action. However, this action requires neither immediate control of the discharge nor measures to protect water quality. A review of regulatory agency files by Deltakeeper indicates in 1981 the Regional Board notified State Park that leachate from tailings were posing a "serious threat to water quality in Little Wolf Creek." Yet, the Regional Board neither required that State Parks abate this harm, nor apply for a permit to regulate the harm.

In January 2002, a Grass Valley resident notified the Regional Board that the Magenta Drain discharge was turning the creek a yellowish/orange color. A subsequent investigation by Regional Board staff revealed the presence of "yellow boy" in the creek that the Magenta Drain discharges into. In February 2002, the Regional Board sent State Parks a letter requesting that they file a report of waste discharge. In a letter dated April 15, 2002, the Regional Board requested a complete technical report identifying the source of the pollutants emanating from Empire Mine. Further, the Regional Board notified State Parks of their requirement to obtain coverage under the Industrial Permit. In a letter to the Regional Board dated April 22, 2002, State Parks "declined" to obtain permit coverage. The Regional Board did not pursue the matter further and the discharge from Magenta Drain remained unpermitted. As explained below, under the tentative permit the Magenta Drain discharge will essentially continue to go unregulated.

Response to Deltakeeper Comment 3

The Empire Mine site is subject to regulation by the Regional Water Board and other agencies, including the Department of Toxic Substances Control. The cleanup of the "yellow boy" in the unnamed tributary to the South Fork of Wolf Crek is being addressed pursuant to Title 27California Code of Regulations Division 2, and is not part of the proposed permit (the subject of these comments). In addition, "leachate" or runoff from tailing piles or waste rock is subject to jurisdiction of the Regional Water Board's Industrial Stormwater Unit. The Department of Parks has submitted Notices of Intent for coverage of the mine site industrial and construction discharges Those discharges are not the subject of the proposed NPDES permit. The Regional Water Board addresses water quality issues based on priorities and staff resource availability.

Deltakeeper Comment 4—Consent Decree Agreements about Magenta Drain

This past January, agreeing limited state resources are best spent addressing the mine pollution in the most expedient way possible, State Parks and Deltakeeper signed a Consent Decree to settle the litigation regarding Empire Mine discharges of pollutants. As part of the Consent Decree, State Parks agreed to:

- Comply with this NPDES permit regulating Magenta Drain discharges
- Apply for $5 million in the State Budget to implement specific pollution control measures, and other remedial measures as well as commit to applying for any future needed funding
- Work with Deltakeeper to determine effective interim measures for "treating, reducing, and/or eliminating the pollutants in the water discharged from the Magenta Drain."
- Work with the Department of Toxic Substances Control ("DTSC") to conduct all removal and remedial actions required by DTSC to address hazardous substances at Empire Mine (with continued monitoring of project progress by Deltakeeper)
- Post bilingual signs warning the public of the hazardous nature of the Magenta Drain discharge and the waters receiving the discharge

Deltakeeper entered into this Consent Decree with an understanding that both storm water and the Magenta Drain discharge would meet CWA standards as quickly as possible in order to curtail pollution problems. In the Consent Decree, the parties agreed to meet and confer on or before June 1, 2008 to discuss whether the Consent Decree can be terminated as State Parks represented that they would be in full compliance with the Clean Water Act by that date. Deltakeeper noted State Parks would be required to act efficiently and swiftly to come into compliance with the Clean Water Act by 2008. However, the tentative permit does not require State Parks to act swiftly to control the pollutants in the Magenta Drain discharge.

Compliance with the NPDES permit, as signed in the Consent Decree, was never intended to allow for a compliance schedule and dangerously high interim levels of metals as found in this tentative permit. These allowances are not consistent with the federal Clean Water Act nor with Porter-Cologne.

Response to Deltakeeper Comment 4

See the response to Deltakeeper Comment 1 above.

Deltakeeper Comment 5—Compliance Schedule Inadequacies

The timeframe proposed in this tentative permit does not comply with the Clean Water Act and does not protect the community and watershed from high levels of metals and other pollutants until 2010. Given the illegality of compliance schedules, the ineligibility to apply SIP allowances, and the danger a compliance schedule would present to this community, Deltakeeper finds the 2010 delay in compliance completely unacceptable.

Response to Deltakeeper Comment 5

The Water Code, the Basin Plan, and federal regulations allow the Regional Water Board to provide compliance schedules in NPDES permits for some constituents. For those constituents where compliance schedules are not authorized by the Clean Water Act and federal regulations, the compliance schedules have been placed in a time schedule order. The Permit and Time Schedule Order comply with applicable federal and state law. See also Response to Deltakeeper Comment 1 above.

Deltakeeper Comment 6—State Senate Expects Timely Remediation

In addition to Deltakeeper's concerns regarding the tentative permit and compliance schedule and TSO, the California State Senate Budget Subcommittee #2 staff report addressed compliance concerns in their staff report for the March 2006 budget subcommittee meeting. The Senate is extremely concerned about any delay in State Parks compliance with the Clean Water Act requirements: "Staff understands the need for some additional studies, but also is concerned that actual work to reduce pollution from the park not be delayed." (Staff report, March 2006). The tentative permit does nothing to address the Senate's concern that State Parks' work to "reduce pollution from the park not be delayed."

Response to Deltakeeper Comment 6

See Response to Deltakeeper Comment 1 above.

Deltakeeper Comment 7— State Parks Is Ineligible for State Implementation Policy's Compliance Schedule Allowance

As set forth in the Consent Decree, State Parks agreed with Deltakeeper to be in compliance with the Clean Water Act requirements as soon as possible. In fact, as set forth in the Consent Decree, State Parks represented to Deltakeeper that they would be in full compliance by 2008—two years before this permit would even require compliance with protective water quality standards.

The tentative permit says the SIP allows the Regional Board to provide a discharger with a compliance schedule *if the discharger can show immediate compliance with the protective California Toxic Rule levels is infeasible.* Deltakeeper does not believe this policy is consistent with the CWA. Further, for this permit, the discharger can meet and indeed must meet CTR prior to 2010.

The permit provides for a workplan and time schedule to be complete September 2006, a study to be done November 2006-October 2007, and a study report to be submitted November 2007. Many studies have already begun. The SIP justification letter from State Parks mentions the Tetra Tech Report conducted in 2004 which characterized the surface water and sediment from Magenta Drain in both wet

and dry seasons. State Parks took additional samples in 2005-2006 and State Parks intends to start continuous flow sampling in May 2006. This tentative permit does not require continuous sampling (for flow, pH, turbidity, electrical conductivity) until May 2010—four years later than State Parks can begin.

While more studies need to be done to better understand the exact source of the toxic material discharging from Magenta Drain, it is still totally feasible to begin treatment. The Magenta Drain report discusses options of vacuuming the sediment, installing a year-round treatment system on-site, and stopping discharge for off-site treatment. Removal of the sediment alone will vastly decrease the propensity for increased flow to suspend the toxic sediments into the creek downstream. All of these are treatments that can be done within a year or so timeframe. The SIP letter from State Parks acknowledges that sediment removal is being considered as an interim measure but would require additional permits through other agencies. In fact, the SIP letter also states: "It is anticipated that the treatment system will be designed and implemented during the 2006-2007 fiscal year."

Further, in the case of Empire Mine, Deltakeeper is not aware of any economic reason that remediation cannot go forth promptly. State Parks has already had a past allocation of $500,000 from the Department of Conservation to fund a human health risk assessment and storm water pollution prevention plan, a current proposed budget item of $5 million for the 2006-07 fiscal year and is talking with the previous mine owner for financial assistance with remediation.

While the cost of the remediation of this legacy pollution is significant, the cost of any public or wildlife health impacts from such dangerously high interim levels outweighs any bills for treatment.

Deltakeeper is unsure why the Regional Board is proposing to not require protective, final effluent limits until 2010. Three or four extra years of toxic discharge is three or four too many for Grass Valley residents. Compliance is feasible in a timeframe much shorter than the one proposed here.

Response to Deltakeeper Comment 7

See Response to Deltakeeper Comment 1 above. The Regional Water Board was not a party to that litigation. The proposed permit was drafted based on information submitted in the Report of Waste Discharge and supplemental information. Studies have been included as Provisions in the Proposed Permit to provide additional information. Sufficient characterization of the mine drainage discharge is necessary to design and construct a system capable of complying with the proposed permit. Regional Water Board staff do not see a benefit to requiring continuous monitoring beyond planning and design prior to completion of a treatment system. The proposed permit does, however, require continuous monitoring once the treatment system is on-line and operational to determine the treatment effectiveness and to confirm compliance with discharge limitations.

Standard Provision V.C.3 of the proposed permit (p. D-7) requires that "[i]*f the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR specified by the Regional Water Board* [*40 CFR §122.41(l)(4)(ii)*]."

Deltakeeper Comment 8— The Proposed Compliance Schedule and Interim Effluent Limits Illegally Delay Achievement of Water Quality Standards

The Clean Water Act mandates that:

> there shall be achieved . . . not later than July 1, 1977, any more stringent limitations, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations . . . or any other Federal law or regulation, or required to implement any applicable water quality standard established pursuant to this chapter.

CWA § 301(b)(1)(C), 33 U.S.C. § 1311(b)(1)(C) (emphasis added). Despite this unambiguous, 27-year-old statutory deadline for achieving water quality-based effluent limitations, the proposed Time Schedule Order authorizes compliance schedules that give State Parks close to four more years to achieve water quality-based effluent limitations for priority toxic pollutants.

Because State Parks alleges it is infeasible to achieve immediate compliance with the CTR criterion or the effluent limitation based on a CTR criterion for certain pollutants, the proposed permit omits water quality-based effluent limits on these parameters and instead imposes a compliance schedule and interim permit limits far more lenient than water quality-based effluent limits. In so doing, the permit gives State Parks an extension for meeting water quality-based effluent limits that extends far beyond the statutory deadline in CWA section 301(b)(1)(C) for achieving water quality-based effluent limitations. 33 U.S.C. § 1311(b)(1)(C). This approach is blatantly illegal and, if upheld, would directly undermine the water quality standards that are the heart of the Clean Water Act.

1. Section 301(b)(1)(C) establishes a firm deadline for complying with water quality-based effluent limitations.

Numerous courts have held that neither the EPA nor the states have the authority to extend the deadlines for compliance established by Congress in CWA section 301(b)(1). 33 U.S.C. §1311(b)(1); See *State Water Control Board v. Train*, 559 F.2d 921, 924-25 (4th Cir. 1977) ("Section 301(b)(1)'s effluent limitations are, on their face, unconditional."); *Bethlehem Steel Corp. v. Train,* 544 F.2d 657, 661 (3d Cir. 1976), cert. denied sub nom. Bethlehem Steel Corp. v. Quarles, 430 U.S. 975 (1977) ("Although we are sympathetic to the plight of Bethlehem and similarly situated dischargers, examination of the terms of the statute, the legislative history of [the Clean Water Act] and the case law has convinced us that July 1, 1977 was intended by Congress to be a rigid guidepost").

This deadline applies equally to technology-based effluent limitations and water quality-based effluent limitations. See *Dioxin/Organochlorine Ctr. v. Rasmussen,* 1993 WL 484888 at *3 (W.D. Wash. 1993), aff'd sub nom. *Dioxin/Organochlorine Ctr. v. Clarke*, 57 F.3d 1517 (9th Cir. 1995) (“The Act required the adoption by the EPA of ‘any more stringent limitation, including those necessary to meet water quality standards,’ by July 1, 1977.”) (citation omitted); *Longview Fibre Co. v. Rasmussen*, 980 F.2d 1307, 1312, (9th Cir. 1992) (“[Section 1311(b)(1)(C)] requires achievement of the described limitations ‘not later than July 1, 1977.’ ”) (citation omitted). Any discharger not in compliance with a water quality-based effluent limitation after July 1, 1977, violates this clear congressional mandate. See *Save Our Bays and Beaches v. City & County of Honolulu*, 904 F. Supp. 1098, 1122-23 (D. Haw. 1994).

Congress provided no blanket authority in the Clean Water Act for extensions of the July 1, 1977, deadline, but it did provide authority for the states to foreshorten the deadline. Section 1313(f) of the Clean Water Act provides that:

> [n]othing in this section [1313] shall be construed to affect any effluent limitations or schedule of compliance required by any State to be implemented prior to the dates set forth in section 1311(b)(1) and 1311(b)(2) of this title nor to preclude any State from requiring compliance with any effluent limitation or schedule of compliance at dates earlier than such dates.

33 U.S.C. § 1313(f) (emphasis added). Because the statute contains explicit authority to expedite the compliance deadline but not to extend it, the Regional Board may not authorize extensions beyond this deadline in discharge permits.

2. The July 1, 1977, deadline applies even where water quality standards are established after that date.

The July 1, 1977, deadline for achieving water quality-based effluent limitations applies equally even if the applicable water quality standards are established after the compliance deadline. Section 1311(b)(1)(C) requires the achievement of "more stringent limitations necessary to meet water quality standards . . . established pursuant to any State law . . . or required to implement any applicable water quality standard established pursuant to this chapter." 33 U.S.C. § 1311(b)(1)(C) (emphasis added). Congress understood that new water quality standards would be established after the July 1, 1977, statutory deadline; indeed, Congress mandated this by requiring states to review and revise their water quality standards every three years. See Id. § 1313(c). Yet Congress did not draw a distinction between achievement of water quality standards established before the deadline and those established after the deadline.

Prior to July 1, 1977, therefore, a discharger could be allowed some time to comply with an otherwise applicable water quality-based effluent limitation. Beginning on July 1, 1977, however, dischargers were required to comply as of the date of permit issuance with water quality-based effluent limitations, including those necessary to meet standards established subsequent to the compliance deadline.

3. Congress has authorized limited extensions for specific purposes, precluding exceptions for other purposes.

In the Clean Water Act Amendments of 1977, Congress provided limited extensions of the July 1, 1977, deadline for achieving water quality-based effluent limitations. In CWA section 301(i), Congress provided that "publicly-owned treatment works" ("POTWs") that must undertake new construction in order to achieve the effluent limitations, and need federal funding to complete the construction, may be eligible for a compliance schedule that may be "in no event later than July 1, 1988." 33 U.S.C. § 1311(i)(1) (emphasis added). Congress provided for the same limited extension for industrial dischargers that discharge into a POTW that received an extension under section 1311(i)(1). See Id. § 1311(i)(2). In addition, dischargers that are not eligible for the time extensions provided by section 1311(i) but that do discharge into a POTW, may be eligible for a compliance schedule of no later than July 1, 1983. See Id. § 1319(a)(6).

The fact that Congress explicitly authorized certain extensions indicates that it did not intend to allow others which it did not explicitly authorize. In Homestake Mining, the Eighth Circuit held that an enforcement extension authorized by section 1319(a)(2)(B) for technology-based effluent limitations did not also extend the deadline for achievement of water quality-based effluent limitations. 595 F.2d at 427-28. The court pointed to Congress' decision to extend only specified deadlines:

> Having specifically referred to water quality-based limitations in the contemporaneously enacted and similar subsection [1319](a)(6), the inference is inescapable that Congress intended to exclude extensions for water quality-based permits under subsection [1319](a)(5) by referring therein only to Section [1311](b)(1)(A).

Id. at 428 (citation omitted). By the same reasoning, where Congress extended the deadline for achieving effluent limitations for specific categories of discharges and otherwise left the July 1, 1977, deadline intact, there is no statutory basis for otherwise extending the deadline.

> 4. Schedules of compliance may be issued only to facilitate, not to avoid, achievement of effluent limitations by the statutory deadline.

The Clean Water Act defines the term effluent limitation as:

> any restriction established . . . on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance.

33 U.S.C. § 1362(11). The term schedule of compliance is defined, in turn, as "a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard." Id. § 1362(17). The purpose of a compliance schedule is to facilitate compliance with an effluent limitation by the applicable deadline by inserting interim goals along the way:

> [a] definition of effluent limitations has been included so that control requirements are not met by narrative statements of obligation, but rather are specific requirements of specificity as to the quantities, rates, and concentration of physical, chemical, biological and other constituents discharged from point sources. It is also made clear that the term effluent limitation includes schedules and time tables of compliance. The Committee has added a definition of schedules and time-tables of compliance so that it is clear that enforcement of effluent limitations is not withheld until the final date required for achievement.

S. Rep. No. 92-414, at 77, reprinted in 1972 U.S.C.C.A.N. 3668 (Oct. 28, 1971) (emphasis added). Thus, Congress authorized compliance schedules, not to extend its deadlines for achievement of effluent limitations, but to facilitate achievement by the prescribed deadlines.

In *United States Steel Corp*., the industry plaintiff argued that 33 U.S.C. § 1311(b)(1)(C) allows the July 1, 1977, deadline to be met simply by beginning action on a schedule of compliance that eventually

would result in achieving the technology- and water quality-based limitations. 556 F.2d at 855. The Court of Appeals disagreed:

> [w]e reject this contorted reading of the statute. We recognize that the definition of 'effluent limitation' includes 'schedules of compliance,' section [1362(11)], which are themselves defined as 'schedules . . . of actions or operations leading to compliance' with limitations imposed under the Act. Section [1362(17)]. It is clear to us, however, that section [1311(b)(1)] requires point sources to achieve the effluent limitations based on BPT or state law, not merely to be in the process of achieving them, by July 1, 1977.

Id. Thus, compliance schedule may not be used as a means of evading, rather than meeting, the deadline for achieving water quality-based effluent limitations.

> 5. States may not issue permits containing effluent limitations that are less stringent than those required by the Clean Water Act.

Finally, a compliance schedule that extends beyond the statutory deadline would amount to a less stringent effluent limit than required by the Clean Water Act. States are explicitly prohibited from establishing or enforcing effluent limitations less stringent than is required by the Clean Water Act. See 33 U.S.C. § 1370; Water Code §§ 13372, 13377. The clear language of the statute, bolstered by the legislative history and case law, establishes unambiguously that compliance schedules extending beyond the July 1, 1977, deadline may not be issued in discharge permits. The tentative permit, however, purports to do just that. By authorizing the issuance of permits that delay achievement of effluent limitations for over thirty years beyond Congress' deadline, the proposed permit makes a mockery of the CWA section 301(b)(1)(C) deadline and exceeds the scope of the Regional Board's authority under the Clean Water Act and the Porter-Cologne Act. 33 U.S.C. § 1311(b)(1)(C).

Response to Deltakeeper Comment 8

See Response to Deltakeeper Comment 1 above. The proposed permit complies with the time schedule requirements contained in the California Toxics Rule (CTR) and the State's Implementation Plan (SIP) for the CTR by requiring compliance prior to May 2010.

The Fact Sheet, at VII.B.7.b, cites the State Water Resources Control Board's (State Water Board) *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California* (State Implementation Policy or SIP) which, at section 2.1, states that "[b]*ased on an existing discharger's request and demonstration that it is infeasible for the discharger to achieve immediate compliance with a CTR criterion, or with an effluent limitation based on a CTR criterion, the RWQCB may establish a compliance schedule in an NPDES permit*."

Deltakeeper Comment 9— The TSO and Compliance Schedule Set Dangerously High Interim Effluent Limitations

The Clean Water Act and its NPDES permit scheme have been established to ensure that, when discharges must occur, that the wastewater does not impair beneficial uses of receiving waters--like recreational use and aquatic health. As discussed above, compliance schedules with interim effluent limitations are not consistent with the mandate of the Clean Water Act. Beyond their illegality, the

interim effluent limitations proposed in the tentative permit and in the proposed time schedule order allow State Parks to discharge pollutants at dangerously high levels. The interim limits proposed are not meant to be protective but to incorporate the broadest levels that might be discharged from Empire before effluent treatment is in place. Deltakeeper believes an interim limit should be the best case, not the worst case, scenario.

Response to Deltakeeper Comment 9

See Response to Deltakeeper Comment 1 above.

Deltakeeper Comment 10— The Interim Effluent Limitations in the Proposed Time Schedule Order Are Unreasonably High

The proposed time schedule order sets forth the "interim, performance-based effluent limitations" that apply to Aluminum, Antimony, Arsenic, Barium, Cobalt, Iron, Manganese, Vanadium, and Total Suspended Solids in the Magenta Drain discharge. Although titled "limitations" the discharge levels permitted under the proposed time schedule order are the "Projected Maximum" levels that the Regional Board calculated could possibly be discharged from the Magenta Drain. The chart below provides a comparison of "effluent limitations" established in the proposed time schedule order and the water quality criteria that are protective of relevant the beneficial uses.

The proposed "effluent limitations" subvert the purpose of the Clean Water Act of protecting water quality and serve no purpose but to ensure that State Parks will never discharge any of these pollutants above the permitted levels.

Parameter (all units ug/L)	What Standards are Protecting	Protective Standard-Concentra-tion ug/L	Average Monthly Effluent Limitation permitted under Time Schedule Order	Final Average Monthly Effluent Limitation	Final Daily Maximum Effluent Limitation
Aluminum, Total Recoverable	Designated Beneficial Uses	71	151,000	71	140
Antimony, Total Recoverable	Designated Beneficial Uses	6	415	6	--
Arsenic, Total Recoverable	Designated Beneficial Uses	10	558,000	10	--
Barium, Total Recoverable	Designated Beneficial Uses	1,000	10,400	1,000	--
Cobalt, Total Recoverable	Designated Beneficial Uses	50	1,080	50	--
Iron, Total Recoverable	Designated Beneficial Uses	300	75,600,000	300	--
Manganese, Total Recoverable	Designated Beneficial Uses	50	2,700,000	50	--
Vanadium, Total Recoverable	Designated Beneficial Uses	100	960	100	--
Total Suspended Solids	Designated Beneficial Uses		27,900	20,000	30,000

Response to Deltakeeper Comment 10

See Response to Deltakeeper Comment 1 above.

Deltakeeper Comment 11— The Interim Effluent Limitations in the Tentative Permit Are Unreasonably High

The chart below, based on information in the permit, compares the final limits and protective standards with interim limits (in red)—an astronomical difference for every metal listed. For cadmium, the daily interim allowance is 60,000 times the public health standard concentration; for chromium, 9 times higher; for copper, 12 times; for lead, almost 1200 times higher; for nickel, over 5 times higher; for thallium, almost 12,000 times higher; for zinc, 460 times the Basin Plan objective; and, for mercury, the maximum daily interim level is over 18,000 times higher.

These exponentially higher allowances put aquatic life and human health in danger.

Parameter (all units ug/L)	What Standards are Protecting	Protective Standard-Concentration ug/L	Effluent Limitations				
			Protective Standard-Quantitative ug/L	Average Monthly	Maximum Daily	FINAL LIMITS Monthly AVG	FINAL LIMITS MAX DAILY
Cadmium, Total Recoverable	Freshwater aquatic life	Public Health 0.07	0.25	**2,100**	**4,200**	0.26	0.53
Chromium (III)	Freshwater aquatic life	Public Health (total Chr) 50	5	**220**	**450**	36	72
Copper, Total Recoverable	Freshwater aquatic life	NTR 4.1 (2)	0.5	**170**	**350**	1.2	2.3
Lead, Total Recoverable	Freshwater aquatic life	CTR 0.92 (2)	0.5	**560**	**1,100**	0.23	0.47
Mercury, Total Recoverable	Human health, cancer	------	0.0005	**4.9**	**9.2**	0.050	0.1
Nickel, Total Recoverable	Freshwater,saltwater aquatic health	CTR-24	5	**65**	**130**	8.6	17
Thallium, Total Recoverable	Risk for human cancer from drinking water, eating aquatic life	NTR 1.7	1	**5,900**	**20,000**	1.7	5.6
Zinc, Total Recoverable	Freshwater aquatic health	CTR/Basin Plan 54/16	10	**3,700**	**7,400**	12	24

Response to Deltakeeper Comment 11

Please see Response to Deltakeeper Comment 1 above.

Deltakeeper Comment 12—The Tentative Permit Needs Clarification on Interim Tests

The permit provides a chart listing interim limits for several constituents—cadmium, chromium, copper, lead, mercury, nickel, thallium and zinc. Other constituents from the final effluent limit chart: TSS, solids, pH, Turbidity, color, aluminum, antimony, arsenic, barium, cobalt, manganese, and vanadium do not have specific interim limits.

Deltakeeper asks staff for clarification on whether the permit requires testing of those items *not* listed in the interim chart and, if so, whether these constituents must meet the final effluent limits. Arsenic, for example, has a USEPA Primary MCL of 10 ug/L but was found previously at Magenta Drain at 35,400 ug/L and barium's MCL of 1000 ug/L has been exceeded up to 2480 ug/L in 2003. At what levels must State Parks address these and other constituents in the interim?

Response to Deltakeeper Comment 12

As stated in the Fact Sheet to the tentative NPDES permit, at VII.B.7 (Compliance Schedules), "[t]*he use and location of compliances schedules in the permit depends on the Discharger's ability to comply and the source of the applied water quality criteria.*" The tentative permit also states (Fact Sheet, VII.B.7.a) that "[f]*or non-CTR-based Effluent Limitations, any necessary time schedules were generally included in the accompanying time schedule order*." The proposed time schedule order includes a compliance schedule for acute toxicity, aluminum, antimony, arsenic, barium, cobalt, color, dissolved oxygen, iron, manganese, pH, settleable solids, total suspended solids, turbidity, and vanadium and interim effluent limitations for aluminum, antimony, arsenic, barium, cobalt, iron, manganese, total suspended solids, and vanadium.

Monitoring and Reporting Program X.B.3 includes the following:

> "*Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule*:

Sampling Frequency	***Monitoring Period Begins On…***	***Monitoring Period***	***SMR Due Date***
Continuous	***1 May 2010***	*All*	*Submit with monthly SMR*
Weekly	***6 August 2006***	*Sunday through Saturday*	*Submit with monthly SMR*
Monthly	***1 August 2006***	*1st day of calendar month through last day of calendar month*	***32*** *days from the end of the monitoring period*
Quarterly	***1 October 2006***	*January 1 through March 31* *April 1 through June 30* *July 1 through September 30* *October 1 through December 31*	***32*** *days from the end of the monitoring period*
Semiannually	***1 January 2007***	*January 1 through June 30* *July 1 through December 31*	***32*** *days from the end of the monitoring period*
Annually	***1 January 2007***	*January 1 through December 31*	***32*** *days from the end of the monitoring period*
Once per Disposal	***1 August 2006***	--	*Submit with monthly SMR"*

The Final Effluent Limitations contained in IV.A.1 of the proposed permit take effect on the effective date of the permit (1 August 2006), with the exception that the Interim Effluent Limitations contained in IV.A.2 of the proposed permit are effective in the interim (1 August 2006 to 18 May 2010) for the listed constituents (*i.e.*, cadmium, chromium, copper, lead, mercury, nickel, thallium, zinc). Limited constituents without Interim Effluent Limitations in the proposed permit are not exempted from the monitoring requirements contained in the Monitoring and Reporting Program. Also, see Response to Deltakeeper Comment 1 above.

Deltakeeper Comment 13—Protecting the Public Is *Possible*

Even more concerning, the permit predicts an increase in public contact with the creek due to the regional population growth and accessibility to the discharge flows. The conclusion in the permit is that

"exclusion of the public is unrealistic." We hope that this is not the case and are content State Parks states they will have a fence up around the portal soon. However, due to the presence of the effluent-based creek beyond State Parks' land, it may be tough to keep the public out of it. Increased public contact strengthens the existing need and reason for protective interim limits and a short compliance schedule.

Response to Deltakeeper Comment 13

See Response to Deltakeeper Comment 1 above.

Deltakeeper Comment 14— Inadequate Groundwater Monitoring

Deltakeeper notes the NPDES permit does not address groundwater monitoring and would like staff to address the potential for groundwater contamination and any potential impact on local residential wells. The State Antidegradation Policy, as noted in the permit, provides for protecting both ground and surface water.

Response to Deltakeeper Comment 14

This proposed permit addresses a point source discharge to surface waters. Potential impacts to groundwater will be addressed pursuant to other regulatory requirements of the Regional Water Board.

Deltakeeper Comment 15— Inadequate Sediment Monitoring

We also note a lack of sediment monitoring other than the solids at time of removal from the creek. In order to prepare a permit thoroughly addressing toxicity issues with the discharge and given the possibility for metals to deposit within the sediment over time, we recommend adding sediment monitoring for constituents previously found in the sediment such as mercury and arsenic.

Specifically, Deltakeeper recommends monthly testing until sediment is removed and, after removal, annual testing to ensure no new deposition of toxic heavy metals.

Response to Deltakeeper Comment 15

As is stated above, The solid waste cleanup of the "yellow boy" is being addressed pursuant to Title 27 California Code of Regulations, Division 2, and is not part of the proposed permit (the subject of these comments). In addition, "leachate" or runoff from tailing piles or waste rock is subject to regulation by the Regional Water Board's Industrial Stormwater Unit, and is not the subject of discussion for the proposed NPDES permit. The comments regarding sediment monitoring would appear to be more applicable to either the Title 27 or stormwater components of the project since the NPDES component—the Magenta Drain discharge—should not result in additional sediment accumulations once the treatment system is installed and operational. The proposed permit contains discharge limitations for suspended and settleable solids that will limit future accumulations of sediments. The proposed permit, in discussing "monitoring of solids at the time of removal", is referring to the removal of solids from treatment processes, such as filter units where solids would be captured and must be properly characterized for proper disposal.

Deltakeeper Comment 16—Missing Mass Loading/Limitations

The permit explanation for federal policy clearly shows that mass loading must be addressed in NPDES permits. Beyond the legality, science also tells us that mass loading needs addressing for Magenta Drain's permit. Mass loading is critical to understand the long-term build-up of bioaccumulants, like mercury, known to be present at the portal. The permit provides for the potential to later add-in mass loading requirements but this does not sufficiently meet the legal and scientific imperatives for compliance with the CWA.

Response to Deltakeeper Comment 16

Regional Water Board staff concur that mass limitations are, in general, legally required and that they are technically necessary to assure that a wastewater treatment system is not overloaded. For this project, the treatment process is not yet designed or built. In order to calculate mass limitations, the flow rate of the treatment system is necessary. The mass of a pollutant equals the concentration of the pollutant multiplied by the flow rate. We know the concentration is the effluent limitation for a given pollutant; however, until the treatment system is designed, the flow rate is unknown and the mass cannot be calculated. Once the treatment system is designed, the permit should be reopened and mass limitations included.

Deltakeeper Comment 17—Methylmercury

Methyl-mercury, the bioavailable form of this heavy metal, causes risks to people and wildlife consuming fish and aquatic organisms. However, the tentative permit only includes a numeric limit for total mercury. During this time in which the Regional Board is addressing the crisis legacy mercury and methyl-mercury have created in the Bay-Delta, we believe the permit must also require methyl-mercury level monitoring at a level protective of subsistence fishing and aquatic health.

It is not appropriate to await a TMDL in order to establish a limit, particularly when Bear Creek is listed as impaired for mercury and we are posting fish-consumption warnings downstream.

Response to Deltakeeper Comment 17

As cited in the Fact Sheet to the proposed permit at IV.D.1, "40 CFR §122.45 states that:

> '*Except in the case of POTWs…, calculation of any permit limitations , standards, or prohibitions which are based on production (or other measure of operation) shall be based not upon the designed production capacity but rather upon a reasonable measure of actual production of the facility. For new sources or new dischargers, actual production shall be estimated using projected production*.'

This Order regulates a long-existing, but previously unpermitted discharge. At this time, the discharge cannot be tied to production as the Empire Mine State Historic Park is not currently in, nor planning to be, in active production of a mined ore. No production-based limitations are included in this Order."

The Monitoring and Reporting Program (p. E-4) to the proposed NPDES permit requires quarterly methylmercury monitoring.

Deltakeeper Comment 18—Hardness

We appreciate the Regional Board's willingness to provide a re-evaluation of the hardness levels for calculating water quality limits after more data is available from the Magenta Drain area.

Response to Deltakeeper Comment 18

Comment noted.

Deltakeeper Comment 19—Data Maintenance

Sampling records, according to the tentative permit, must be held 5 years. Both as reference for future mine remediation projects and for the long-term evaluation of compliance, we recommend data be held 7-10 years (which will be past the expiration date of this permit).

Response to Deltakeeper Comment 19

Normally the Regional Water Board files are maintained beyond five years. We request Dischargers maintain their files for compliance and quality assurance reviews. In order to provide consistent regulatory oversight the permit will not be modified for extending records retention.

Deltakeeper Comment 20—Conclusion

The Deltakeeper Chapter of Baykeeper appreciates Regional Board consideration of the importance of drafting a permit including requirements for State Parks to come into immediate compliance with the Clean Water Act as contemplated by the Court in the Consent Decree. Deltakeeper acknowledges State Parks continued work towards fulfilling the requirements of the Consent Decree in order to protect this beautiful community and riparian system. However, the Regional Board is proposing to adopt a permit that does not comply with the Clean Water Act, and in fact authorizes the continued degradation of Grass Valley waterways. The Deltakeeper Chapter is confused and disappointed that the Regional Board is presenting a tentative permit with a time schedule much longer that that for which the dischargers themselves has proposed.

The public expects the State to set the standard for complying with the law and relies on agencies like the Regional Board to ensure other agencies do not use loopholes to evade the law.

If the private sector sees the Regional Board supports permits allowing a public agency to continue polluting astronomic levels of heavy metals for several years--why should those industries expect any different treatment?

More importantly, how will the Regional Board address the families who find their kids—maybe too young or short to see the warning signs—trying to cool off from the hot foothill summers in this creek with toxic metal levels thousands of times higher than safe limits?

Response to Deltakeeper Comment 20

DeltaKeeper's comments are appreciated.

RESIDENT COMMENTS

More than two dozen residents of the Grass Valley area submitted comments. In general, the comments confirmed existing beneficial uses of the receiving stream and expressed grave concerns over the interim effluent limitation concentrations, the length of the time schedule for compliance, and the risk of exposure until compliance is achieved. The comments regarding the interim limitations and compliance schedule submitted using variations on a form letter have been grouped as Resident Comment 1 and are responded to there. The remaining comments are summarized below.

Resident Comment 1—Interim Limitations and Compliance Schedule (composite of variations on form letter)

As a long-time resident of Nevada County and the City of Grass Valley, I am deeply concerned about the proposed interim limits for effluents that drain out the "Magenta Drain" from Empire Mine State Park. I raised my children in this town, at this community park, playing with them in the creek, unaware of the contaminants no warnings were posted in this downstream community park, so how would a young mother new to the community know a creek running through the middle of a children's playground was deadly?

I am deeply concerned about the proposed interim limits for effluents that drain out the *Magenta Drain* from Empire Mine State Park. This waterway is not *out in the country.* It passes thru a community park within ¼ mile of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St.

The proposed interim limits for cadmium, 2100 ug/L is 8000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. At 5 ppb cadmium causes nausea, vomiting, diarrhea, muscle cramps, salivation, sensory disturbances, liver injury, convulsions, shock and renal failure. The International Agency for Research on Cancer (IARC) has determined that cadmium is carcinogenic to humans. A concentration of 0.001 mg/l in freshwater hardness above 100 mg/l CaCO3 is considered harmful to aquatic life.
(http://www.probeinternational.org/ebi/contaminants/cadmium.html). EPA has set a maximum contaminant level of 0.005 ug/L cadmium for drinking water
(http://www.epa.gov/safewater/mcl.html#mcls)

The proposed interim limits on lead, 560 ug/L is 2000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. The Centers for Disease Control says lead poisoning is the most common and devastating environmental disease affecting young children. (http://orgs.unca.edu/eqi/lead.htm) The EPA has set a maximum contaminant level of ZERO ug/L lead for drinking water with an *action level* of .015 ug/L (http://www.epa.gov/safewater/mcl.html#mcls)

The proposed interim limits on Thallium, 5900 ug/L is 3000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. Thallium can affect the human nervous system, lung, heart, liver, and kidney if large amounts are eaten or drunk for short periods of time. Temporary hair loss, vomiting, and diarrhea can also occur and death may result after exposure to large amounts of thallium for short periods. Thallium can be fatal from a dose as low as 1 gram.

(http://www.atsdr.cdc.gov/toxprofiles/phs54.html) The EPA has set a maximum contaminant level of .005 ug/L lead for drinking water (http://www.epa.gov/safewater/mcl.html#mcls)

Levels for Zinc and Copper, known toxins for aquatic life, are several hundred times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin.

The Empire mine has been aware of this problem ever since the Regional Board notified them in 1981.

We are concerned that the park has not addressed this problem sooner. We are concerned that the park recently embarked on the multi-million dollar construction of a historical adit *ride* for visitors before protecting the well-being of the local residents.

We believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. We are concerned that the parks have already had enough time to address this problem, and are not taking seriously the concerns of our community.

Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

While this is a form letter, drafted by a local creek alliance, I fully support it and feel ardently that the Water Board must take action to protect public health.

Please protect us.

Response to Resident Comment 1

The comment is correct in that interim limits and compliance schedules are not protective of aquatic life and wildlife beneficial uses. Unfortunately, once water quality problems are found, engineering solutions are often time-intensive to design and implement before a proper workable project can be found and implemented. Interim limitations are included in the proposed order based on the existing water quality, prior to implementation of a project to achieve compliance with protective discharge limitations. The proposed permit contains a compliance schedule to allow for planning design and implementation (likely construction) of a system to meet final limitations that are fully protective of all of the beneficial uses of the receiving stream. The proposed time schedule was developed based on experience regarding the amount of time it can take to plan, sample, conduct environmental review, design and construct treatment systems. Regional Water Board staff is aware that sampling and studies are already underway which may significantly expedite compliance. Regional Water Board staff would be fully supportive of any effort to expedite compliance and correct the significant water quality issues associated with this mine site.

As stated in the Fact Sheet to the proposed permit at III.C.6 (p. F-11), the proposed permit would impose "*effluent limitations on the existing discharge for the first time. The primary means of compliance are (1) treatment of waste stream to comply with effluent limitations and (2) cessation of discharge. Implementation of either alternative would result in improved water quality downstream of the existing discharge*".

Additional comments (Resident Comments 2 through 15) confirming existing beneficial uses of the receiving stream and expressing concerns over the interim effluent limitation concentrations, the length

of the time schedule for compliance, and the risk of exposure until compliance is achieved are shown below. Regional Water Board staff believe that the Response to Resident Comment 1 above addresses most of these comments. While the remaining comments submitted cannot be adequately addressed within the scope of this document, please note that all comments submitted are appreciated and have been taken into consideration.

Resident Comment 2—Exposure and Compliance Schedule

We live in Grass Valley and have a young son. We use Memorial Park, and it has recently come to our attention that there are high levels of heavy metals, higher than safe for people and aquatic life, in the creek that runs through the park, and on down into Wolf Creek. I believe Wolf Creek is a drinking water source for the city of Grass Valley.

We understand that the Regional Water Quality Control Board will be reviewing the permit for the discharge from Magenta Drain at Empire State Park, the source of the contaminants in Magenta Drain.

Our request is that the Regional Board require the parks to comply with protective limits for iron, lead, arsenic and any other limited substances as soon as possible. I heard that the board is considering giving the parks until 2010 to comply. We encourage the board to stop the pollution of this highly accessible creek. There are LOTS of balls and frisbees that end up in the creek, so there is lot of human exposure, not to mention the aquatic life that has no voice.

Please let us know what comes of this.

Resident Comment 3—Exposure and Interim Limitations

Since many children, and adults, play in our park's waters I am deeply concerned about the proposed interim limits for effluents that drain out the "Magenta Drain" from Empire Mine State Park.

This waterway is not "out in the country." It passes thru a community park within ¼ of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St.

I'd be interested to know what your decision might be on renewing the mine's permits to dump toxic waste into our public stream.

Resident Comment 4—Arsenic Levels

This letter is in reference of the renewal of Empire Mine's authorization to release water having toxic chemicals particularly, arsenic into local water ways. I definitely oppose renewal of that authorization by any agency which grants such permission.

Resident Comment 5—Interim Limitations and Compliance Schedule

As a resident Of Grass Valley, I am writing you concerning the effluents that drain out the "Magenta Drain" from Empire Mine State Park. The effluent drains right through the middle of our city.

The proposed interim limits for cadmium from the Magenta Drain, far exceeds the limits acceptable in the Water Quality Control Plan for the Sacramento River Basin. That cadmium in the water is carcinogenic to humans.

The Empire mine has been aware of this problem ever since the Regional Board notified them in 1981. The park has not addressed protecting the well-being of the local residents.

I believe that the State Parks have the resources to address this problem way before the year 2010, as the interim limit allows.

Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

Resident Comment 6—Poisonous Drainage is Insult to Veterans' Memorial

I am a 100% disabled veteran (decorated with both Silver and Bronze Stars) who has lived in or near Grass Valley for over thirty years. I am writing to urge you to all in your power to end the practice of allowing the Empire Mine to drain contaminated water into our public waterways. As you know, the Magenta Drain flows into Grass Valley's Memorial Park and onward into Wolf Creek. I feel it is an insult and moral abomination to have the poisonous water (arsenic and heavy metals) passing though the memorial honoring so many of my fallen comrades, and urge you to do all in your power to end this practice.

Resident Comment 7—Contact Recreation, Agricultural Use, and Interim Limitations

I am seriously concerned about the proposed interim limits for effluents draining Empire Mine State Park, namely the "Magenta Drain". This waterway has human contact within community parks in Grass Valley, immediately adjacent to children's' playgrounds, ballfields, and barbeque areas, within ¼ mile of the Grass Valley City Hall, joining Wolf Creek in the downtown area. There are agricultural diversions on Wolf Creek shortly downstream, and it is used as raw water supply for agriculture, including organic farms.

Resident Comment 8—Unacceptable Interim Limitations

PLEASE revoke the renewal for the permit that allows Empire Mine to continue draining poisons, these poisons containing thousands of times of the allowable amounts of toxins, into our public waterways.

Resident Comment 9—Clean-up of Discharge

As a resident of Grass Valley--Nevada City I am forwarding to you this information on Wolf Creek toxicity by way of asking you please to make any renewal of the permit granted to the Empire Mine to discharge water into Wolf Creek contingent upon clean-up of the water to be discharged.

Resident Comment 10—Interim Limitations, Compliance Schedule, Public vs. Private Entity, and Mercury Impairment

I've read your draft permit for effluent limits for Empire Mine and Magenta Creek and I do not believe the interim limits are appropriate. The interim limits and very very long time frame under which they

will apply contain exceptionally high levels of metals and seem designed to reflect what has been draining from the mine into surface waters than what should be released into surface waters.

I ask that you research how long these interim limits have been in place for this permittee and specifically report that to the Board. They need to have some context for the amount of leeway that has been given to Empire Mine. I would also ask that you research information on the length of time major private dischargers are given to comply with limits closer to the final limits in the permit and publicly report on the similarities and differences in treatment between state entities and private entities in their permit requirements.

The mercury limit in and of itself is outrageously high. The Bear River is already listed as impaired and there is probably enough evidence to list Wolf Creek for mercury as well. To continue to allow such high discharges into an impaired waterbody seems to me to be a flagrant violation of the intent of the Clean Water Act.

I would be more willing to consider interim limits if they were substantiated based on solid pre- and post-mine remediations and time frames, and with a clause in the permit that would find the permittee out of compliance if they were not actively proceeding down the remediation path, on schedule with it, and spending sufficient amounts of money on monitoring and assessment to determine exactly what effects the remediation is having.

Resident Comment 11—Interim Limitations, Exposure of Children

The proposed standards review for water quality in Wolf Creek far exceed what has been considered acceptable by the scientific community. Whether it be cadmium, arsenic, lead, thallium, mercury or copper, the amounts of these substances draining into the creek are unacceptable. While funds are expended on an unnecessary underground "mine experience", the creek continues to pose a hazard to this community.

Wolf Creek runs thru my backyard. Had I known that the arsenic level at some places was 35,400ug/L, I might have stopped my kids from swimming in it. Now it is too late for them, but I urge you and the board members to seriously consider reducing these toxins to reasonable levels.

Resident Comment 12—Exposure of Children

THIS IS A PARK THAT I TAKE MY GRANDKIDS TO.

Resident Comment 13—Arsenic, Potential Drinking Water Contamination

I have heard that the Magenta Drain that drains out of Empire Mine is contributing large amounts of arsenic to wolf creek. Our property borders the creek our well is also fairly close. We are concerned that this poison is being allowed to flow into the waterway, potentially poisoning the wildlife and possibly our drinking water. What can be done to reduce this problem?

Resident Comment 14—Arsenic and Cadmium

I understand that a creek in my neighborhood in contaminated with arsenic and cadmium due to runoff of Empire Mine State Park area. Please see about this.

Resident Comment 15—Photographs of Unnamed Tributary to South Fork Wolf Creek as it Passes Through Memorial Park in Grass Valley